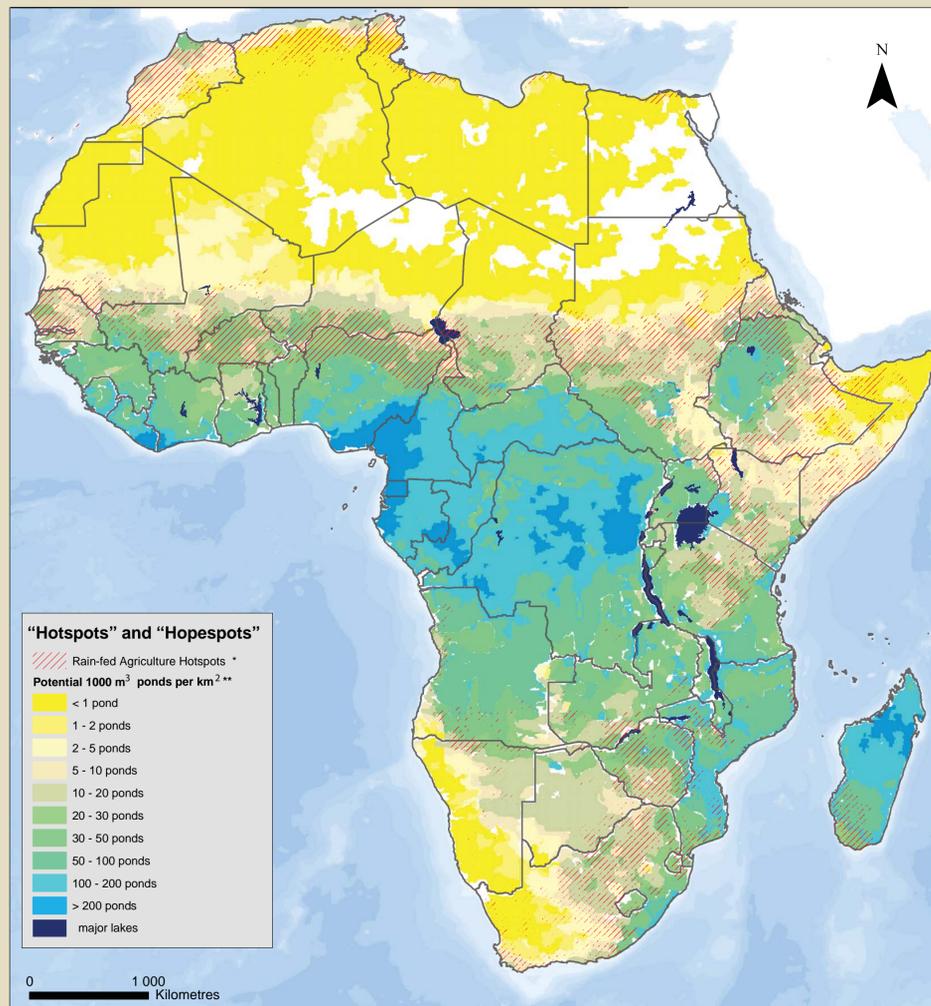




AFRICA WATER ATLAS

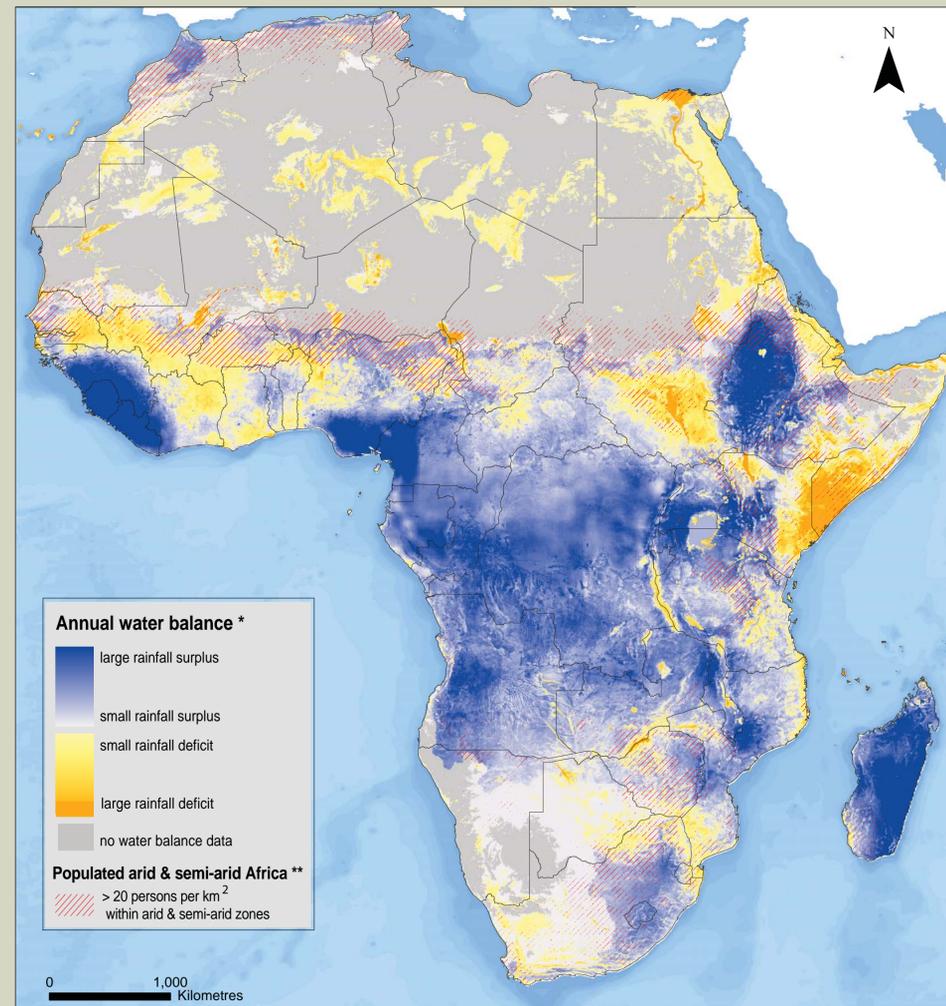


Hotspots to Hopespots

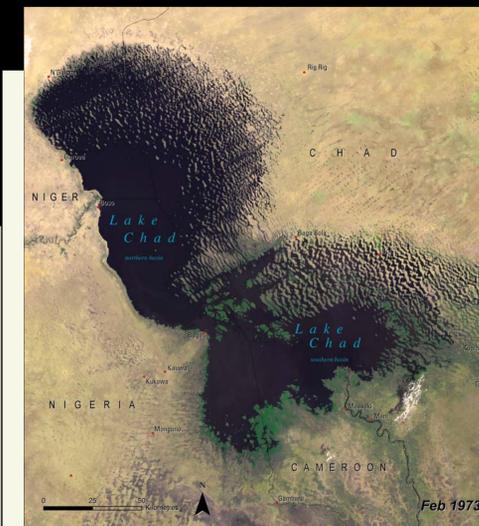


Areas of water-limited, rain-fed agriculture or “hotspots” (red hatching) are overlain on a map showing the potential for rainwater harvesting in terms of number of 1 000 m³ ponds per km². This map layer is derived from water balance data and the many places where “hotspots” overlap areas of significant water harvesting can be viewed as “hopespots” where rainwater harvesting may be able to improve food security.

Annual Water Balance



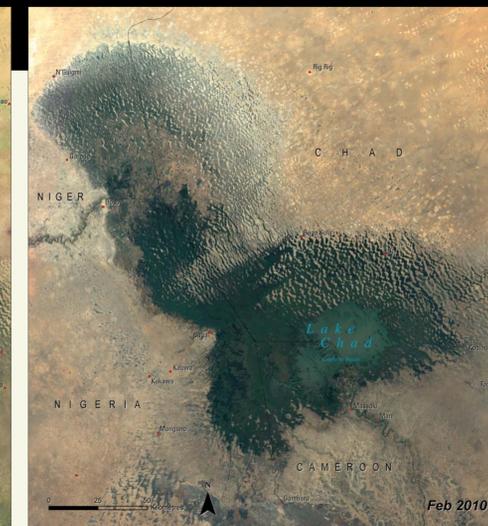
Annual water balance is an estimate of the available runoff after evapotranspiration—water that is potentially available for water harvesting. Yellow indicates areas of runoff deficit; blue indicates areas of runoff surplus. The red hatching overlaying the water balance map shows where population density of greater than 20 persons per km² coincides with areas defined as arid or semi-arid.



While Lake Chad’s surface area fluctuates considerably with the seasonal rains, these dry-season images of Lake Chad show the long-term

Lake Chad

Lake Chad, which fluctuates considerably with the seasonal rains, has shrunk significantly since the 1960s due to a combination of severe droughts and irrigation-water abstraction. It is one of the Sahel’s largest freshwater reservoirs, makes up just over eight per cent of the surface area of Africa and falls across the boundaries



trend since the 1960s. Changes in rainfall during this period have been a major factor as has diversion for irrigation.

of eight countries—Algeria, Cameroon, Central African Republic, Chad, Libya, Niger, Nigeria and Sudan. In the 1960s, Lake Chad was about 25 000 km² in surface area, but it experienced a rapid shrinkage in the early 1970s and has since been fluctuating between 2 000 and 15 000 km², depending on the season.

Lake Faguibine

When Lake Faguibine in the Niger River Basin is full, it is among West Africa’s largest lakes, covering approximately 590 km². During the great droughts of the 1970s and 1980s, however, it began declining and by the 1990s was completely dry, with

After drying up in the 1990s Lake Faguibine has not refilled significantly, however some pooling

significant impacts on local livelihoods. Although some pooling has occurred since then, Lake Faguibine has not refilled significantly. Work is underway to clear debris from channels that feed the lake.

has occurred during wet years. Work is underway to clear debris from channels that feed the lake.

